

Title (en)
CHARGER AND CHARGING METHOD

Title (de)
LADEGERÄT UND LADEVERFAHREN

Title (fr)
CHARGEUR ET PROCÉDÉ DE CHARGEMENT

Publication
EP 3761477 A1 20210106 (EN)

Application
EP 20157373 A 20200214

Priority
CN 201910589181 A 20190702

Abstract (en)
A charger (100) includes a first connection port (111), a second connection port (112), a DC-DC converter (120), a first microcontroller (130), and a second microcontroller (140). The DC-DC converter is configured to convert a first DC voltage into a second DC current/voltage according to a regulation signal (S1), and output the second DC current/voltage through the second connection port. The second DC voltage is lower than the first DC voltage. The first microcontroller is configured to communicate with a DC charging station (300) by handshake via the first connection port. When the handshake between the first microcontroller and the DC charging station succeeds, the first microcontroller generates a regulation indication (I1) according to a result of the handshake between the first microcontroller and a battery, the second microcontroller generates the regulation signal according to the regulation indication, and the first DC voltage is supplied by the DC charging station.

IPC 8 full level
H02J 7/00 (2006.01); **B60L 53/22** (2019.01)

CPC (source: CN EP US)
B60L 53/14 (2019.01 - US); **B60L 53/16** (2019.01 - US); **B60L 53/22** (2019.01 - EP); **B60L 53/305** (2019.01 - EP US); **B60L 53/60** (2019.01 - US); **B60L 53/62** (2019.01 - CN); **B60L 58/10** (2019.01 - CN); **H01M 10/44** (2013.01 - US); **H02J 7/00** (2013.01 - US); **H02J 7/00032** (2020.01 - US); **H02J 7/00036** (2020.01 - EP US); **H02J 7/00045** (2020.01 - EP); **H02J 7/0047** (2013.01 - US); **H02J 7/00712** (2020.01 - EP); **H02J 7/02** (2013.01 - US); **H02J 7/04** (2013.01 - CN); **B60L 2210/10** (2013.01 - EP US); **B60L 2210/30** (2013.01 - EP US); **B60L 2240/547** (2013.01 - EP); **B60L 2240/549** (2013.01 - EP); **H02J 7/00045** (2020.01 - US); **H02J 2207/40** (2020.01 - EP US); **H02J 2310/48** (2020.01 - EP); **Y02E 60/10** (2013.01 - EP); **Y02T 10/70** (2013.01 - EP); **Y02T 10/7072** (2013.01 - EP); **Y02T 10/72** (2013.01 - EP); **Y02T 10/92** (2013.01 - EP); **Y02T 90/12** (2013.01 - EP); **Y02T 90/14** (2013.01 - EP); **Y02T 90/16** (2013.01 - EP)

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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EP 20157373 A 20200214; CN 201910589181 A 20190702; CN 202310798002 A 20190702; JP 2020083044 A 20200511; US 201916595706 A 20191008